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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/707,157	11/24/2003	Russell Rose	RS147	1156
23470	7590	01/11/2006		
SRAM CORPORATION 1333 N. KINGSBURY, 4TH FLOOR CHICAGO, IL 60622			EXAMINER BELLINGER, JASON R	
			ART UNIT	PAPER NUMBER
			3617	
DATE MAILED: 01/11/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/707,157	ROSE ET AL.	
	Examiner	Art Unit	
	Jason R. Bellinger	3617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 October 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-38 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6, 9, 10 and 20-38 is/are rejected.
- 7) ☒ Claim(s) 7-8, 11-19 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

2. Claims 20-38 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 20 is indefinite due to the fact that it is unclear how a first spring element is “configured to resist displacement of the first expander element by the lever actuator”. No structure has been provided in the claim to describe:
- a. Where the first spring is located with respect to the first expander element and lever actuator, and
 - b. How the first spring functions to prevent displacement of the first expander element by the lever actuator.

Claim Rejections - 35 USC § 103

3. The text of those sections of Title 35; U.S. Code not included in this action can be found in a prior Office action.
4. Claims 1-6 and 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shinichi (JP 8175453) in view of Zoor. Shinichi shows an axle assembly for mounting a wheel hub W to a vehicle frame 2. An axle 1 includes first and second ends 12 mountable to the vehicle frame 2 (at installation part 21). These ends 12 are configured to be radially deformable to secure the axle 1 to the vehicle frame. A plurality

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of open-ended slots 15 is disposed at the ends 12. A wedge-shaped expander element 6 is disposed proximate the ends 12 of the axle 1, and is shaped to radially deform the ends 12 of the axle 1 in response to axial displacement. The first and second ends 12 of the axle 1 is formed as a tubular body (13-14) that has first (the axially outermost portion) and second (the axially inner portion that connects to flange portion 16 of the axle 1) ends which are mountable to the vehicle frame 2 (at installation part 21).

While only one side of the axle assembly is shown, it is obvious that the axle assembly of Shinichi would include a second axle end opposite to, and a mirror image of, the end shown by Shinichi, in order to allow the axle assembly to be mounted in a bicycle fork 2.

Shinichi does not show a lever actuator and follower assembly disposed to radially deform the ends of the tubular body (13-14). In Figures 5-6, Zoor teaches the use of a quick-release assembly including a lever actuator 13 and a follower assembly 21. The lever actuator 13 includes a cam 10 configured to axially displace the follower assembly 21 in response to pivoting of the lever actuator 13. A barrel 19 is rotatably received by the lever actuator 13, and is eccentrically disposed within the lever actuator 13 such that the cam 10 axially displaces the follower assembly 21 in response to pivoting of the lever actuator 13. The follower assembly further includes a linking member 22.

Therefore from this teaching, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide the axle of Shinichi with the quick-release assembly of Zoor (minus nut 23, which is not required in Shinichi) for the

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purpose of allowing quick and easy installation of a wheel to the frame of a bicycle, by eliminating the need for extra tools.

The linking member 22 of Zoor would be connected to the axially outer end of the expander element of Shinichi. This would operably connect the cam 10 to the expander element 6 (of Shinichi). In the configuration shown in Figure 6 of Zoor, the follower assembly 21 would be in contact with the axial face of installation part 21 of the vehicle frame 2 of Shinichi. This would prevent the expander element 6 (which is connected to the linking member 22 of Zoor) of Shinichi from radially deforming the slotted (15) end 12 of the axle 1. Pivoting of the lever actuator 13 of Zoor in a radially upwards direction would cause axial displacement of the follower assembly 21 and the linking member 22 (to which the expander 6 of Shinichi is attached), and thus cause the expander element 6 of Shinichi to radially deform the ends of the tubular body (13-14) of the axle 1 of Shinichi. This is due to the fact that the follower assembly 21 would move axially to the right (as shown in Figure 6 of Zoor), while the linking member 22 (and the attached expander element 6 of Shinichi) would then move axially to the left deeper into the tubular body (13-14), thus radially deforming the ends 12 of the axle 1 of Shinichi and securing the axle 1 to the vehicle frame 2.

Allowable Subject Matter

5. Claims 7-8 and 11-19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

6. Claims 20-38 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

Response to Arguments

7. Applicant's arguments filed 25 October 2005 have been fully considered but they are not persuasive. The Applicant argues that Shinichi does not show an open-ended slot, etc. located at each end of the axle. However, it is well known in the art that an axle assembly would include similar, if not identical, elements on each end of the axle to allow the axle to be secured to a bicycle frame.

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

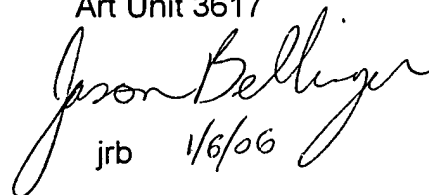
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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason R. Bellinger whose telephone number is 571-272-6680. The examiner can normally be reached on Mon - Thurs (9:00-4:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Morano can be reached on 571-272-6684. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jason R Bellinger
Examiner
Art Unit 3617


jrb 1/6/06